CLAIMS

What is claimed is:

- A layered material for use in an electronic component, comprising: 1.
- 5 a substrate layer;

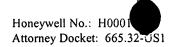
an active component layer that comprises an active material coupled to an adhesion promoter layer, wherein the adhesion promoter layer is selectively patterned to expose a contact area on the active material; and

at least one additional layer.

- The layered material of claim 1, wherein the substrate layer comprises a silicon-based 10 2. compound.
 - The layered material of claim 1, wherein the electronic component is a printed circuit 3. board.
 - The layered material of claim 1, wherein the active material comprises a resistor. 4.
- The layered material of claim 1, wherein the active material comprises a capacitor. 15 5.
 - The layered material of claim 1, wherein the active material comprises a metal. 6.
 - 7. The layered material of claim 6, wherein the metal is copper or nickel.
 - The layered material of claim 1, wherein the adhesion promoter layer comprises an 8. organic material.
- The layered material of claim 8, wherein the organic material comprises black oxide. 9. 20
 - The layered material of claim 1, wherein the at least one additional layer comprises an 10. adhesive.
 - The layered material of claim 1, wherein the at least one additional layer comprises an 11. active component layer.
- The layered material of claim 1, wherein the at least one additional layer comprises a 12. 25 dielectric material.
 - The layered material of claim 12, wherein the dielectric material is porous. 13.

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- 14. The layered material of claim 12, wherein the dielectric material comprises an organic compound.
- 15. An electronic component comprising the layered material of claim 1.
- 16. The electronic component of claim 15, wherein the component is a printed circuit board.
 - 17. An electronic product comprising the layered material of claim 1.
 - 18. A method of producing a layered material for an electronic component, comprising: providing an active material layer;
 - forming an active component layer by applying an adhesion promoter layer to the active material layer;

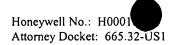
coating the active component layer with a photoresist material;

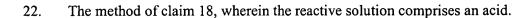
patterningly exposing a portion of the photoresist material;

removing the unexposed photoresist material from the active component layer to form a bare active component layer comprising the active material and the adhesion promoter layer and a covered active component layer comprising the active material, the adhesion promoter layer and the photoresist material;

contacting the bare active component layer with a reactive solution, wherein the reactive solution removes the adhesion promoter layer from the bare active component layer in order to form the contact area; and

- removing any remaining photoresist material from the active component layer.
 - 19. The method of claim 18, wherein providing an active material layer comprises providing a continuous or non-continuous resistor material layer, a capacitor material layer, or a signal layer material layer.
- The method of claim 18, wherein forming an active component layer comprises
 spinning on or printing the adhesion promoter layer on to the active material layer.
 - 21. The method of claim 18, wherein patterningly exposing comprises using a photoresist mask, a laser beam, or a patterned light source.





- 23. The method of claim 22, wherein the acid is sulfuric acid.
- 24. The method of claim 18, further comprising the steps of electrically testing layered material by contacting an electrical probe to the contact area.

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